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(58) Field of Search

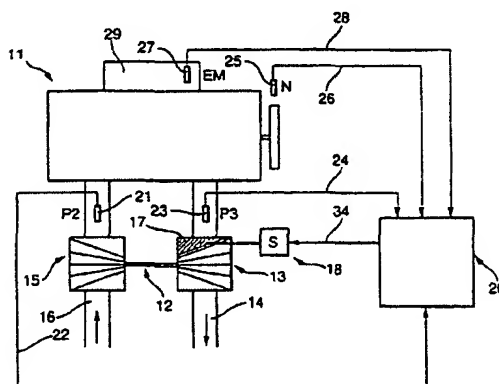
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## (54) Controlling turbocharger boost pressure

(57) In a method of controlling the boost pressure in an internal combustion engine 11, which is supercharged by means of an exhaust gas turbo-charger 12, with an adjustable turbine control apparatus 17, signals corresponding to an injection quantity "EM", engine speed "N", boost pressure "P2", and exhaust pressure "P3", are fed to a control unit 20 that provides a control signal to an actuator 18, that controls the gas flow cross-section into the turbine. The control system derives a desired boost pressure value from signals indicative of "EM2", "N" and atmospheric pressure, and compares this with a signal corresponding to actual boost pressure to produce a deviation signal (dP2)(fig. 2). "N" and "EM" signals are also used to derive a reference "P3" signal, that is compared with a signal (P3\*) (fig.2) representing the difference between the signal corresponding to "P3" and the signal corresponding to "P2", thereby producing a deviation signal (dP3\*). The deviation signals (dP2 and dP3) are then fed to a fuzzy control unit (33) (figs. 2 and 3) to produce a control signal for the actuator 18. Excessive increases in exhaust backpressure during a positive engine load change, which would oppose engine torque build-up, are thereby avoided.

Fig. 1



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